

THE PLOTTER

CLACKAMAS COUNTY AREA T/S
USERS GROUP
NEWS LETTER

VOLUME 5 **** NUMBER 11
 **

NOVEMBER 1987

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MEETING

The NOVEMBER meeting will be:

on: FRI., NOVEMBER 13, 1987

at: 7:30 P.M.

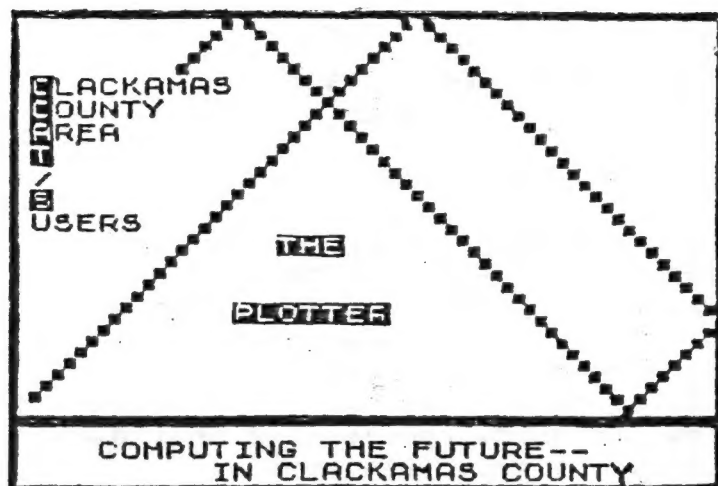
in: COMMUNITY ROOM

FAR WEST FEDERAL S & L

OREGON CITY SHOPPING CENTER

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Chairman's Corner

We had an extra special event in our club last month. October 16th was Dick Wagner's 50th anniversary! Happy Anniversary Dick!!

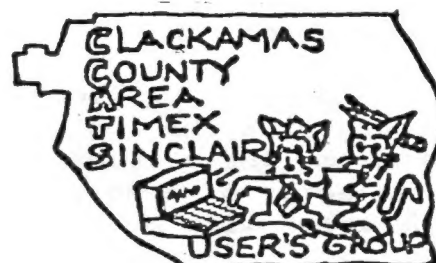
We had a great turn-out and FUN at the Seattle Mini-Fair. I wish to thank Time Designs Magazine and RMG Enterprises for their sponsorship of this wonderful event.

Thanks are also in order for the Seattle User groups for their extra efforts as hosts.

And, I wish to thank our bus driver, Bill Dunlop, OH NO!!

I learned a lot at the Mini-Fair, as I had never been to this kind of event before. We need to have a better display at our user group table next year. I also learned how to do a seminar (I did not do well, this time). But, it was great fun and very worth the trip.

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SECRETARY'S
SECRETS

Sub by Dick Wagner

President Syd Wyncoop opened the meeting at 7:45. He appointed volunteers Ed Fry and Ken Lutes to represent CCATS in future negotiations for getting started with the 1988 computer meet. At the Seattle meet Tim Woods recommended that each user group take this action.

A "thank you" card was obtained by Laura Gowen and members present signed it for mailing to the host group, SAETUG. Syd and Rod gave reports on the meet and offered suggestions for help in hosting or attending another meet. Along this line, Syd will make available a program of "windows" to enhance monitor displays.

D.E. Lewis informed members of a CPM user group swap meet occurring the next day (Saturday). This is a semi-annual event held in Tigard at the fire station building. He also described a computer museum he had recently attended in the vicinity of the main Post Office in Portland.

Syd passed out reprints of a magazine article. Micro Cornucopia is running a 2-part series of an optical reader attachment for a large printer. Ed Fry has a few optical sensors suitable for this use and he thought he would try his hand at this project.

Ken Lutes reported that he was successful in copying to EPROMs with the equipment owned by our group. He promised a demonstration for the November meeting.

Syd presented some problems he has experienced with the limitations of Zues program. There seems to be a limiting factor of memory capacity in conjunction with machine code.

Meeting adjourned at about 8:30 with about 14 people in attendance.

The Great N.W. Computer Fair is now past history. Rod will have details in his Bits & Bytes column so I will have only a couple of comments. We had a 3-table space with nothing more to display than copies of our last news letter. Equipment I had planned to use for a scrolling message with a TS 1000 failed the day before leaving. Essentially, members just did not know what the facilities would be like nor what other groups would be doing.

We handed out 50 copies of our newsletter and had the opportunity to talk with quite a few people. As I recall, one man was from Vermont, being in Seattle on business.

For CCATS to host the meet in 1988 it will require not only a lot of member participation in preparation but a very active work force during the meet to keep everything going on schedule. We hope the membership stays up for 1988.

This issue has less input from the editor for which I thank everyone who has contributed. You know, when I have to generate most of the material required for an issue it is what interests me. The way to get a wide range of subjects is to submit articles and programs. Seldom have I heard a request for a specific subject, no matter how complicated. I can probably find someone to write on the subject if I can't.

No doubt you have noticed the slant toward disk drives and large printers as they become more common with our members. From experience I know that there just are problems in working out satisfactory results from this equipment. Once things are working then it becomes a new experience in learning how to use these pieces of equipment and develop ways to get the most results for the investment dollar. There have been cries for help but we never learn what the user has learned. How about a few reports on how these difficulties were overcome.

BITS & BYTES

by: ROD GOWEN

Heard any TS related news lately? Did you get any information in the mail from other users, user groups, or vendors that may be of interest to our readers? If so, why not share it with us? We need all of the help that we can get. Please send any info that you might have to: Rod Gowen, C/O CCAT/S, 1419 1/2 7th Street, Oregon City, OR 97045, or, phone in at: 503/655-7484, 10 AM- 10 PM weekdays. I know that the entire user group will appreciate it!

THE GREAT NW TS MINI-FAIR-is now history. I hope that you, like most of those to whom I have spoken, had a good time. At last count, there were about 180 attendees. That's not bad! We hope that next year we will have even more people attending! There were 3 dealers there: Weymil Corp., Time Designs Magazine and RMG Enterprises. There were 5 users' groups represented: CCAT/S, SEATUG, VISTA, Vancouver B. C., and Victoria Sync Association. There were 7 seminars, hourly doorprize drawings, and on site snack concession. There was a sort of mass user group meeting at the end of the day hosted by Tim Woods of Time Designs at which plans were made to have each of the users' group pick 2 representatives to a committee to meet in a month or so to start plans for next years' Mini-Fair. Our reps were volunteers! Ken Lutes and Ed Fry will be talking for CCAT/S. We will report on the plans as they are made. We foresee an even better show next year!

WEST FEST-San Francisco/Bay area groups making plans for a major west coast TS computer fest, announced that all plans for that event have now been scrapped. We do not know the reason, but will report on it as soon as we know more.

A&J MICRODRIVE-has stopped production of all TS related microdrive units as of the 1st of June, 1987. This news is a month or two old, but we may have overlooked printing it as it occurred. Jim Howell of A&J told us that they will continue to supply and support the units that

are out in use until such time as demand drops to a low level. The last of the new inventory was sold to E. Arthur Brown Co. At last report, Brown had about 1/2 dozen units left.

LARKEN ELECTRONICS-has just released the AERCO/LKDOS Cartridge for those who own the Aerco FD-68 1/F and would like to use a more powerful DOS. The new cartridge will give you all of the DOS commands that you do not get with Aerco plus the additional Extended Basic commands as well as the use of the extra Ram on the Aerco board as a REAL RAM-DISK. If your FD-68 has 64K on it, you will have a 45K Ramdisk with 40K usable. If your board has 256K, you will have 4 separate 40K Ramdisks! You must make a minor modification to the FD-68 in order to use the Larken DOS Cart. It should take about 15 minutes to cut the jumper wire that Aerco uses on the NMI line and install a SPDT switch. If you add the 3rd wire to the switch, you will also have the NMI function at your disposal. That is the "SNAP SHOT" save routine. If you are an AERCO RP/M user, you do not lose the ability to use your RP/M. You just remove the cartridge and flip the switch and you are back to standard FD-68 status! The new cartridge will be available through only 2 places: RMG Enterprises and Larken himself. The price? Just \$65.00 plus S&H. RMG also says that they will make the mod to the Aerco board for \$10 plus shipping.

PROMISED LAND ELECTRONICS-Rt. 1, Box 117, Cabool, MO 65689, (417) 469-1712, Attention: Dan Elliott. That's the place and person to write or call if you are looking for someone to repair you TS computer! A sample: 2068 repairs- \$15 plus parts and shipping. If you would like a price list, just call (between 5 and 10 PM CENTRAL TIME) or write Dan.

T.O.P.S.-the newsletter started by Dave Franson to support Zebra disk system users has folded after only 1 issue. Dave was quoted as saying that the job had become "a real big pain in the butt!" after those who had agreed to help with the undertaking failed to do anything to

LARKEN LINES

by: ROD GOWEN

Well, here I am! Back for a second column! I have not received ANY feedback on the first installment, but, to be fair, I am going to write at least 3 columns to give it a chance. If, at that point, I have not had any feedback, then my warning: "IF I FAIL TO GET ENOUGH INPUT (TIPS, HINTS AND IDEAS FOR COLUMNS) FROM YOU, THE READERS, IT WILL CEASE AS QUICKLY AS IT IS BEGINNING! I do not have the time to come up with ALL the material needed to do justice to a column of this type." will go into effect! C'MON FOLKS!

By this time I would hope that most of you Larken users would have mastered the basics of your system, but, just in case, I am going to take a quick run-through on the basic commands.

FIRST! And most important-if you wish to use the PRINT #4: command, you must enter the following direct command or install it in your Basic program:

```
RANDOMIZE USR 100:OPEN #4, "dd"
```

That command opens channel #4 to the disk drives. Once that line is implemented, you need only use the PRINT #4: in front of each of the commands in LKDOS. Those commands are:

PRINT #4:

```
LOAD "fn.B1"           for BASIC
LOAD "fn.C1"CODE       for MC
LOAD "fn.C1"SCREEN$    for SCREEN$
SAVE "fn.B1"           for BASIC
SAVE "fn.C1"CODE       for MC
SAVE "fn.C1"SCREEN$    for SCREEN$
```

You can also SAVE and LOAD all types of ARRAYS, the same as you would with cassette.

```
MERGE "fn.B1"          for BASIC
CAT "",                to Catalog a disk
CAT ".B1",             Catalogs only BASIC
CAT ".C1",             Catalogs only MC
```

(This selective Cataloging can be used to list only specific files in the directory.)

```
ERASE "fn.B1",         to ERASE BASIC
ERASE "fn.C1",         to ERASE MC
```

Beyond these, with the LKDOS Cart, you get LKDOS EXTENDED BASIC commands. We will go into these in a later column.

A sample routine would perhaps be helpful. The following sample shows how to set up a Basic program to accept the PRINT #4: and to LOAD and SAVE files:

```
100 REM SAMPLE PROGRAM
110 PAPER 1: INK 7: BORDER 1: C
LS
120 RANDOMIZE USR 100: OPEN #4,
"dd"
130 PRINT #4: LOAD "SAMPLE.C1"
SCREEN$: PRINT #4: LOAD "SAMPLE.
C1"CODE 50000 : PRINT #4: LOAD "
SAMPLE.B1"
9999 PRINT #4: SAVE "SAMPL1.B1"
LINE 100
```

In this short sample program, LINE 120 opens the channel to the disk drive, LINE 130 show the various LOAD commands in actual use. LINE 9999 is a standard SAVE line set up for LKDOS. PLEASE NOTE! YOU ARE LIMITED TO 6 CHARACTERS IN THE FILENAME! Filenames with more than 6 characters will return the error message "INVALID FILE NAME".

The MERGE command in LKDOS is not quite the same as it is without it. It does the same thing, EXCEPT, that the program continues to run. It does not, as with a normal 2068, LOAD the program and then stop.

The FORMAT and COPY commands on the Larken system are LOADED from disk. There was just not enough room in the Eprom for them. They are very good routines and work very well.

Larry Kenny says that he will soon have the disk editor finished and ready for sale. We will keep you informed as to when it is available.

That's all for this time. Let me know if you have any ideas for future columns.

Later...RLG

The Check Writer

(or, How to convert decimal digits to printable strings)

I originally wrote the following program for a customer in MicroSoft's Extended Disk Basic. It does not transfer to Timex Basic as well as I had hoped but will perhaps be of use to you.

I have often said that I much prefer the method Sinclair used for string handling over MicroSoft's however, this time I found a reason to like MicroSoft Basic.

You will note that the strings are DIMensioned to the length of the longest required string of the group. MicroSoft Basic does not require the second parameter therefore, the strings can be different lengths within the same array. I chose to eliminate some of the additional spaces this creates by use of the backspace character (CHR\$ 8). This fix will not work on some printers and may require a loop to slice off the trailing spaces but, I will leave that to you.

The work is done in lines 110 to 250, with a companion subroutine at line 500. It would normally be called as a subroutine, from within your program, with the variable C\$ containing a string of printable digits.

The first step is to ensure the number is padded-out to two decimal places, which is why it is handled as a string. Then all leading 0's and spaces are removed. There is no error checking done for non-digits as the original program ensured the data was checked prior to placing it on the disk.

I converted it to Timex Basic as lots of individual lines in order to allow compatibility with the TS1000. 2068 users will be able to compact it greatly.

Also, as it stands the program will not properly write any amount that exceeds 9,999,999.99. You can of course change this.

The program will be of interest to you if you running a business that writes a lot of checks. I have retained the copyright as it is part of another program however, you are free to modify and use it for your own use.

```

1 REM The Check Writer
2 REM 1987 by Syd Wyncoop
3 REM
4 LET getdigit=500
10 REM Set-up check writing
   strings
11 REM Set-up One$
12 DIM O$(10,5)
13 LET O$(1) = "VOID*"
14 LET O$(2) = "One "+CHR$ 8
15 LET O$(3) = "Two "+CHR$ 8
16 LET O$(4) = "Three"
17 LET O$(5) = "Four"
18 LET O$(6) = "Five"
19 LET O$(7) = "Six "+CHR$ 8
20 LET O$(8) = "Seven"
21 LET O$(9) = "Eight"
22 LET O$(10) = "Nine"
23 REM Set-up Ten$
24 DIM T$(10,8)
25 LET T$(1) = "**VOID**"
26 LET T$(2) = "**VOID**"
27 LET T$(3) = " Twenty"
28 LET T$(4) = " Thirty"
29 LET T$(5) = " Forty"
30 LET T$(6) = " Fifty "+CHR$ 8
31 LET T$(7) = " Sixty "+CHR$ 8
32 LET T$(8) = " Seventy"
33 LET T$(9) = " Eighty"
34 LET T$(10) = " Ninety"
35 REM Set-up Teen$
36 DIM N$(10,10)
37 LET N$(1) = " Ten "+CHR$ 8+CHR$ 8
38 LET N$(2) = " Eleven "+CHR$ 8
39 LET N$(3) = " Twelve "+CHR$ 8
40 LET N$(4) = " Thirteen"
41 LET N$(5) = " Fourteen"
42 LET N$(6) = " Fifteen "+CHR$ 8
43 LET N$(7) = " Sixteen "+CHR$ 8
44 LET N$(8) = " Seventeen"
45 LET N$(9) = " Eighteen"
46 LET N$(10) = " Nineteen"
99 REM
100 REM Test Program
101 INPUT "Enter the number to write" LINE C$
102 GO SUB 110
103 PRINT K$
104 GO TO 100
110 REM Enter the subroutine
   with C$=number to write
111 REM Pad-out number to two
   decimal places and make
   sure no leading spaces
   or leading zeroes

```

```

112 LET A$=C$+".00"
113 IF A$(1)=" " THEN LET A$=A$
(2 TO ): GO TO 113
119 LET c=1
120 FOR i=1 TO LEN A$
121 IF A$(i)="." THEN GO TO 124

122 LET c=c+1
123 NEXT i
124 LET c=c+2
125 LET A$=A$( TO c)
126 IF A$(1)="0" THEN LET A$=A$
(2 TO ): GO TO 126
127 LET c=LEN A$: IF A$(c)="." T
HEN LET A$(c)="0"
130 REM Convert to string
131 LET c=LEN A$
132 LET K$="****"
133 LET flag=0
134 IF c=3 THEN GO TO 220
135 IF c<10 THEN GO TO 140
136 GO SUB getdigit: LET K$=O$(a
)+" Million, "
140 IF c<9 THEN GO TO 150
141 GO SUB getdigit: IF a=1 THEN
GO TO 150
142 LET K$=K$+O$(a)+" Hundred":
LET flag=1
150 IF c<8 THEN GO TO 160
151 GO SUB getdigit: IF a=1 THEN
LET K$=K$+" ": GO TO 160
152 IF a=2 THEN GO SUB getdigit
: LET K$=K$+N$(a): LET flag=1: G
O TO 170
153 LET K$=K$+T$(a): LET flag=1
154 GO SUB getdigit: IF a=1 THEN
GO TO 170
155 LET K$=K$+"-"+O$(a): LET fla
g=1: GO TO 170
160 IF c<7 THEN GO TO 170
161 GO SUB getdigit: IF a=1 THEN
GO TO 170
162 LET K$=K$+O$(a): LET flag=1
170 IF flag=1 THEN LET K$=K$+"
Thousand, ": LET flag=0
171 IF c<6 THEN GO TO 180
172 GO SUB getdigit: IF a=1 THEN
GO TO 180
173 LET K$=K$+O$(a)+" Hundred":
LET flag=1
180 IF c<5 THEN GO TO 190
181 GO SUB getdigit: IF a=1 AND
flag=1 THEN LET K$=K$+" ": LET
flag=0
182 IF a=1 THEN GO TO 190
183 IF a=2 THEN GO SUB getdigit
: LET K$=K$+N$(a): GO TO 210
184 LET K$=K$+T$(a)
185 GO SUB getdigit: IF a=1 THEN
GO TO 210
186 LET K$=K$+"-"+O$(a): GO TO 2
10

```

```

190 IF c<4 THEN GO TO 210
191 GO SUB getdigit: IF a=1 THEN
GO TO 210
192 LET K$=K$+O$(a)
210 IF c<=3 THEN GO TO 220
211 LET K$=K$+" AND "
220 LET A$=A$(LEN A$-1 TO )
221 IF A$="00" THEN LET K$=K$+"
No": GO TO 240
223 GO SUB getdigit: LET K$=K$+S
TR$(a-1)
230 LET K$=K$+A$
240 LET K$=K$+"/100****"
241 REM most checks have the
word 'dollars' printed
on them but, you could
add it here if needed
as follows:
241 LET K$=K$+" Dollars"
250 RETURN
500 REM getdigit
501 LET a=VAL A$(1)+1
502 LET A$=A$(2 TO )
503 RETURN
9989 STOP
9990 MOVE "Checks.bas",: CAT "",

```

Continued from page 1

If you are a TS1000 user, you would have seen some pretty nice things being done with and for the old ZX81. Keep an eye on Wilf Ritger from the Vancouver, B.C. user group.

Lastly, I obtained a copy of the nifty window program that greeted you, as you came into the Mini-Fair. This was compliments of the Seattle User Group, SEATUG. The tape is in our library and Rod Gowen has the documentation.

In case you have not heard, we will be hosting next year's fair. At last night's meeting, Ken Lutes and Ed Fry volunteered to be our club representatives, for a cooperative planning committee, for next year's fair. If you have any questions, ideas, suggestions, etc., please contact one of the three of us. Since our club will be the hosts, all of us will need to work on this project.

Which brings me to the next subject, attendance. I have noticed a sharp decline in our club meeting attendance. We have had a specific and different topic of discussion each meeting this year. We combined with the PATS group earlier this

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CALCULATE ANY EASTER DATE

Dick Wagner

Easter is defined as the ceremony held on the first Sunday after the date of the first full moon that occurs on or after March 21. We all know that we can go to a current calendar to find the date for Easter. How about next year, or 30 years ago, or the year 1999? Well, this program will do the job. It is based on a Julian calendar calculation, which is another program at a future time. This program also uses modulo arithmetic which you don't need to know about to run the program. I have included explanations of the various equations should you wonder about modulo math, or did you study it in school? Anyway, just follow the prompts for proper input of the desired year and there you are!

The following has been extracted and adapted to Sinclair Basic from the book "Forecasting On Your Microcomputer" authored by Daniel B. Nickell, TAB Books Inc.

Modulo math can be illustrated as:

$2000_{\text{mod } 19} = 19 * (2000 / 19 - \text{INT}(2000 / 19)) = 5$

This essentially states that the carry from dividing 2000 by 19 is the same as the carry * 19. The calculation must be to many places to get 5 in this example.

The author has included the various variables and equations, labeled as in the program. To continue with the algorithm for computing the date of Easter:

1. $A = Y_{\text{mod } 19}$
2. $B = \text{INT part } Y / 100$
3. $C = Y_{\text{mod } 100}$
4. $D = \text{INT part } B / 4$
5. $E = B_{\text{mod } 4}$
6. $F = \text{INT part } (B + 8) / 25$
7. $G = \text{INT part } (B - F + 1) / 3$
8. $H = (19 + B - D - G + 15)_{\text{mod } 3}$
9. $I = \text{INT part } C / 4$
10. $K = C_{\text{mod } 4}$
11. $L = (32 + 2E + 21 - H - K)_{\text{mod } 7}$
12. $M = \text{INT part } (A + 11H + 221) / 451$
13. $N = \text{INT part } (H + L - 7M + 114) / 31$
14. $P = (H + L - 7M + 114)_{\text{mod } 21}$
15. The day of the month on which

Easter falls = $P + 1$

15. The month of Easter is = N where January is 1

```

10 PRINT "PROGRAM TO CALCULATE
EASTER FOR ANY YEAR": PRINT
20 DIM M$(5,8): LET M$(2)="FEB
RUARY": LET M$(3)="MARCH": LET M
$(4)="APRIL": LET M$(5)="MAY"
30 DEF FN M(X,Y)=Y*(X/Y-INT (X
/Y))
35 REM this can be read as M(X
,Y) is the same as X mod Y.
40 INPUT "Enter year (4 digits
) ";Y
50 LET A=FN M(Y,19)
60 LET B=INT (Y/100): LET C=FN
M(Y,100)
70 LET D=INT (B/4): LET E=FN M
(B,4)
80 LET F=INT ((B+8)/25): LET G
=INT ((B-F+1)/3)
90 LET H=FN M((19*A)+B-D-G+15,
30)
100 LET I=INT (C/4): LET K=FN M
(C,4)
110 LET L=FN M(32+(2*E)+(2*I)-H
-K,7)
120 LET M=INT ((A+(11*H)+(22*L)
)/451)
130 LET Z=H+L-(7*M)+114: LET N=
INT (Z/31): LET P=FN M((H+L-(7*M
)+114),31)
140 PRINT "EASTER SUNDAY, ";Y;"
, falls on ";M$(N);INT (P+1)

160 PAUSE 200: CLS : PRINT "Ano
ther year? y or n ": PAUSE 200:
IF INKEY$="y" OR INKEY$="Y" THEN
CLS : GO TO 20

```

I must say that I do not have a history of Easter dates to refer back to to determine the accuracy of the calculations. At least it works for this year.

THIS AND THAT

Dick Wagner

I have just received a letter from my computer friend Henry Hill in Halifax, Nova Scotia. He has problems implementing a DOS program, SPDOS, similar to LKDOS. How to help someone so far away? We are lucky to have nearby help from our members. Henry is getting supplies from Rod thru the RMG catalog.

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help. We certainly understand how he feels. Too bad, but it does take a lot of work to put out a newsletter of that scope. Dave reportedly returned all subscription checks.

NOMINATIONS-for group officers will take place at the November meeting! That is the next one coming up. If you think that by not attending, you will not be nominated, FORGET IT! There have been several of our officers in the past who were nominated AND elected without being there! BE SURE TO ATTEND AND BRING YOUR NOMINATIONS! We need nominees for the offices of CHAIRMAN, VICE-CHAIRMAN and SECRETARY.

Well, I had better save some news for the next issue, so I will stop for this time. Sorry we missed you last month, but glad to be back.

Later....RLG

Continued from page 6

year. We even changed the meeting time, as requested. Why don't you attend?!! I would like to know.

There are a few of us that are putting in a lot of work (notice how much outside input Dick gets for this newsletter!) and it appears to be unappreciated. The club will cease to exist without

all of our efforts and contributions. This is our club, let's make it work!

On a more positive note and as I have mentioned in the last two newsletters, we have new officer nominations at the november meeting and elections at the december meeting. Plan to be there and express your desires.

Syd

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- 8 -

CCAT/S

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